

REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants' attorney wishes to thank the Examiner for the courtesies extended during the telephone conference of October 23, 2006. Based on discussions, Applicants have amended the claims to include inherent language indicating that the separately packaged semiconductor die is prepackaged prior to being placed onto the package module.

Claims 2, 4-6, 8, 9, 12, 13, 41, 44-46, 48, 54, 56, 58, 60, 63 and 65 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. patent No. 6,630,727 (Tutsch et al.) in view of U.S. Patent No. 5,475,264 (Sudo et al.). In FIG. 2, Tutsch teaches the use of two unpackaged die both being encapsulated onto the substrate 8. In contrast, Applicants claim, among other things, as noted for example in claim 56, both an unpackaged semiconductor that is directly attached to the package module and encapsulated onto the package module, along with a separately prepackaged semiconductor die whose top surface is of equal distance from the substrate as the planar top surface of the encapsulated structure. As shown in FIG. 2 of Tutsch, the top surface of both unpackaged dies are below the top surface of the encapsulated structure and both packaged die are encapsulated onto the substrate 8. The molding compound 12 is placed on top of both die 1 and die 2. In contrast, Applicants claim a different approach in which a planar top surface of the encapsulated structure of the unpackaged die and a top surface of the packaged semiconductor die are of equal distance from the substrate. (See Applicants' Specification, FIG. 6 and elsewhere, showing and describing for example, package dies 120, 130 having their top portions an equal distance from the substrate compared to the top of the planar portion of an encapsulated unpackaged die). Accordingly, since the reference does not teach the claimed structure, the claims are in condition for allowance. The dependent claims add

additional novel and non-obvious subject matter. In addition, they are also allowable at least as depending from allowable base claims.

Claims 47, 59, 61, 66 and 67 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tutsch et al. in view of Sudo et al. and further in view of Lu et al. Applicants respectfully reassert the relevant remarks made above with respect to the Tutsch reference and as such, these claims are also in condition for allowance as the Tutsch reference does not teach what is alleged in the office action.

Claims 3, 7, 17, 18, 20, 24, 25, 53, 57 and 64 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tutsch et al. in view of Sudo et al. and further in view of Hannah '232. As to the independent claims, Applicants again respectfully reassert the relevant remarks made above with respect to the Tutsch reference since Tutsch does not teach what is alleged in the office action but teaches a different structure. Accordingly, the claims are in condition for allowance.

The dependent claims add additional novel and non-obvious subject matter.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tutsch et al. in view of Sudo et al. as applied to claim 56 and further in view of Takano et al. '907. Applicants respectfully reassert the relevant remarks made above with respect to claim 56 and as such, this claim is also believed to be in condition for allowance.

Claim 23 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tutsch et al., Sudo et al. and Hannah as applied to claim 57 and further in view of Takano et al. Applicants respectfully reassert the relevant remarks made above with respect to claim 57 and as such, this claim is also believed to be in condition for allowance.

Applicants respectfully submit that the claims are in condition for allowance, and an early Notice of Allowance is earnestly solicited. The Examiner is invited to telephone the below-listed

attorney if the Examiner believes that a telephone conference will expedite the prosecution of the application.

Respectfully submitted,

Dated: 10/23/06

Christopher J. Reckamp
Christopher J. Reckamp
Reg. No. 34,414

Vedder Price Kaufman & Kammholz, P.C.
222 North LaSalle Street, Suite 2600
Chicago, Illinois 60601
Phone: (312) 609-7599
Fax: (312) 609-5005